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10/763,344	01/23/2004	Vahan Simidian II	HPVTEC.001A	7077

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EXAMINER
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DABNEY, PHYLESHA LARVINIA

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/763,344

Applicant(s)

SIMIDIAN ET AL.

Examiner

Phylesha L. Dabney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 19-33 is/are rejected.
- 7) ☒ Claim(s) 15-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/7/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This action is in response to the application filed on 23 January 2004 in which claims 1-33 are pending.

#### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “dampening device” of claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

Claims 1-33 are objected to because of the following informalities: there are enumerable grammatical errors; for example, claim 33 states "characteristically dipole". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, since a definition was not available in the specification, it is not understood what constitutes the dampening "device".

With respect to claim 12, it is not understood which ones of the racks include one row.

With respect to the claims, there are enumerable instances where there is insufficient antecedent basis for this limitation in the claim; for example, claim 5 recites the limitation "said grid" in 4.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-14, and 19-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (U.S. Patent No. 5,819,959) in view of Trufitt (U.S. Patent No. 5,283,836).

Regarding claims 2 and 28, Martin teaches a surface loudspeaker array comprising a plurality of vertically-splayable speaker racks (fig. 1; col. 6 lines 31-45, wherein it is stated that each interlocked truss bar 80 holds a column of cabinets) that are connected together vertically in a serial manner.

Martin fails to teach that each of the vertical speaker racks contains any particular type of speaker including a plurality of planar magnetic transducers or flat panel speakers.

Trufitt teaches including planar magnetic transducers in a vertical speaker racks for producing wide range of frequencies while maintaining small size dimension. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a planar magnetic transducer in the invention of Martin, as taught by Trufitt for the reasons stated above.

Regarding claims 3-4 and 30, the combination of Martin and Trufitt teaches a surface loudspeaker array further comprising a first attachment device (fig. 1; items 80, 108, 112, 120, 130), wherein said first attachment device is adapted to engage at least one of said vertically-splayable speaker racks.

Regarding claim 5, the combination of Martin and Trufitt teaches a surface loudspeaker array as recited in claim 4, wherein said first attachment device (fig. 1; items 80, 108, 112, 120,

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130) includes a plurality of suspension points (98, 112, 114) from which said surface loudspeaker array can be suspended, said suspension points arrayed in a triangle, and wherein said grid includes at least one attachment point for a tensioning device.

Regarding claim 6, the combination of Martin and Trufitt teaches a surface loudspeaker array as recited in claim 3, wherein said first attachment device (fig. 1; items 80, 108, 112, 120, 130) comprises a plurality of suspension points (98, 112, 114) from which said surface loudspeaker array can be suspended.

Regarding claim 7, the combination of Martin and Trufitt teaches a surface loudspeaker array as recited in claim 6, wherein said plurality of suspension points (98, 112, 114) is arrayed in a triangle (fig. 1; angular adjusting in the horizontal direction).

Regarding claim 8, see the rejection of claim 5.

Regarding claims 9-10, the combination of Martin and Trufitt teaches a surface loudspeaker array further comprising a second attachment device (fig. 2; 40, 89, 142), said second attachment device adapted to engage said first attachment device or at least one of said vertically-splayable speaker racks.

Regarding claim 11, the combination of Martin and Trufitt teaches a surface loudspeaker array as recited in claim 10, wherein said second attachment device (fig. 2; 40, 89, 142) includes

at least one attachment point for a tensioning device.

Regarding claim 12, the combination of Martin and Trufitt teaches a surface loudspeaker array as recited in claim 2, wherein said vertically-splayable speaker racks (figs. 1-2, 140) include one row of planar magnetic transducers or flat panel speakers.

Regarding claim 13, the combination of Martin and Trufitt teaches a surface loudspeaker array as recited in claim 12, wherein said planar magnetic transducers or flat panel speakers are splayed apart horizontally (fig. 1, 140).

Regarding claims 14 and 29, the combination of Martin and Trufitt teaches a surface, wherein said planar magnetic transducers or flat panel speakers are rectangular (Martin, figs. 1-2; Trufitt, figs. 1-2).

Regarding claim 19, the combination of Martin and Trufitt teaches a surface loudspeaker array as recited in claim 2, wherein said adjacent vertically-splayable speaker racks are attached using a plurality of attachment hardware (76, 144) and angle control devices (fig.2; items 40, 89, 142).

Regarding claim 20, the combination of Martin and Trufitt teaches a surface loudspeaker array as recited in claim 19, wherein said angle control devices comprise a plurality of slots (fig. 2, 6-10; items 42, 44, 46, 48).

Regarding claims 21-22, the combination of Martin and Trufitt teaches a surface loudspeaker array as recited in claim 20, wherein at least two of said plurality of slots differ in length (fig. 9; item 42 is different in length/distance from the focal point 44 and each other).

Regarding claim 23, Martin teaches a surface loudspeaker array kit comprising: a plurality of vertically-splayable speaker racks (fig. 1; col. 6 lines 31-45, wherein it is stated that each interlocked truss bar 80 holds a column of cabinets), a plurality of hardware, said hardware (fig. 2; items 76, 144) adapted to attach said vertically-splayable speaker racks to one another, said hardware comprising means for pre-setting a splaying angle (44, 144, fig. 11); a first attachment device (fig. 1; items 80, 108, 112, 120, 130), said first attachment device adapted to engage at least one of said vertically-splayable speaker racks in a forward or reversed orientation, said first attachment device comprising a plurality of suspension points (98, 112, 114) from which said surface loudspeaker array can be suspended; a second attachment device (fig. 2; 40, 89), said second attachment device adapted to engage at least one of said vertically-splayable speaker racks; and a tensioning device (142), said tensioning device adapted to engage said first attachment device and said second attachment device.

Martin fails to teach that each of the vertical speaker racks contains any particular type of speaker including a plurality of planar magnetic transducers or flat panel speakers.

Trufitt teaches including planar magnetic transducers in a vertical speaker racks for producing wide range of frequencies while maintaining small size dimension. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to



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use a planar magnetic transducer in the invention of Martin, as taught by Trufitt for the reasons stated above.

Regarding claims 24-25, they teach a method corresponding to apparatus claim 23. The method is inherent in that it simply provides the logical implementation of the structure found in claim 23.

Regarding claims 26-27, they teach a method corresponding to apparatus claim claims 2-5, 8, and 19-21. The method is inherent in that it simply provides the logical implementation of the structure found in claims 2-5, 8, and 19-21.

Regarding claim 31, the combination of Martin and Trufitt teaches a surface loudspeaker array as recited in claim 30, wherein said speaker rack describes a curved surface (fig. 3; 107-108, 110).

Regarding claim 32, the combination of Martin and Trufitt teaches a surface loudspeaker array as recited in claim 30, wherein said speaker rack at least partially describes a flat surface (fig. 3; 80, 102).

Regarding claim 33, although the combination of Martin and Trufitt teaches that the speaker configuration can be angled, the combination fails to specifically teach that the angular orientation of the planar magnetic transducers or flat panel speakers forms a dipole characteristic.

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However, the examiner takes official notice that it is known and well within ordinary skill in the art to position the speaker configuration in any orientation including dipolar for beneficially obtaining the desired sound coverage in the space, such as a concert hall. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to orient the speakers of the combination of Martin and Trufitt at any angle to achieve the desired sound coverage.

#### ***Allowable Subject Matter***

Claims 15-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

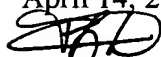
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phylesha L. Dabney whose telephone number is 571-272-7494. The examiner can normally be reached on Mondays, Tuesdays, Wednesdays, Fridays 8:30-4 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 14, 2006

  
PLD

  
**SUHAN NI**  
**PRIMARY EXAMINER**